

7.5. ICM Assessment Blueprint

HiLLO Number	High-Level Learning Outcomes (HiLLOs)	SLEs and MSF					ES Report	FFICM Examinations		
		ACAT	CBD	Mini-CEX	DOPS	MSF		MCQ	OSCE	SOE
1	The doctor will be able to function successfully within NHS organisational and management systems whilst adhering to the appropriate legal and ethical framework.	✓	✓			✓	✓	✓		✓
2	The doctor will be focused on patient safety and will deliver effective quality improvement, whilst practising within established legal and ethical frameworks.	✓	✓	✓	✓	✓	✓	✓		✓
3	An Intensive Care Medicine specialist will know how to undertake medical research including the ethical considerations, methodology and how to manage and interpret data appropriately.	✓	✓				✓	✓	✓	✓
4	To ensure development of the future medical workforce, a doctor working as a specialist in Intensive Care Medicine will be an effective clinical teacher and will be able to provide educational and clinical supervision.	✓				✓	✓		✓	✓
5	Doctors specialising in Intensive Care Medicine can identify, resuscitate and stabilise a critically ill patient, as well as undertake their safe intra-hospital or inter-hospital transfer to an appropriately staffed and equipped facility.	✓	✓	✓	✓		✓	✓	✓	✓

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6	Intensive Care Medicine specialists will have the knowledge and skills to initiate, request and interpret appropriate investigations and advanced monitoring techniques, to aid the diagnosis and management of patients with organ systems failure. They will be able to provide and manage the subsequent advanced organ system support therapies. This will include both pharmacological and mechanical interventions.	✓	✓	✓	✓		✓	✓	✓	✓
7	Specialists in Intensive Care Medicine can provide pre-operative resuscitation and optimisation of patients, deliver post-operative clinical care including optimising their physiological status, provide advanced organ system support and manage their pain relief.	✓	✓	✓	✓		✓	✓	✓	✓
8	Doctors specialising in Intensive Care Medicine will understand and manage the physical and psychosocial consequences of critical illness for patients and their families, including providing pain relief, treating delirium and arranging ongoing care and rehabilitation. They will also manage the withholding or withdrawal of life-sustaining treatment, discussing end of life care with patients and their families and facilitating organ donation where appropriate.	✓	✓	✓	✓		✓	✓	✓	✓
9	Intensive Care Medicine specialists will have the skillset and competence to lead and manage a critical care service, including the multidisciplinary clinical team and providing contemporaneous care to a number of critically ill patients.	✓	✓			✓	✓	✓	✓	✓

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10	Intensive Care Medicine specialists will have developed the necessary skills of induction of anaesthesia, airway control, care of the unconscious patient and understanding of surgery and its physiological impact on the patient.		✓	✓	✓	✓	✓	✓	✓	
11	In order to manage acutely ill patients outside the Intensive Care Unit, an Intensive Care Medicine specialist will have the diagnostic, investigational and patient management skills required to care for ward-based patients whose condition commonly requires admission to the intensive care unit.	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	Doctors specialising in Intensive Care Medicine understand the special needs of, and are competent to manage patients with neurological diseases, both medical and those requiring surgery, which will include the management of raised intracranial pressure, central nervous system infections and neuromuscular disorders.	✓	✓	✓	✓		✓	✓	✓	✓
13	A specialist in adult Intensive Care Medicine is competent to recognise, provide initial stabilisation and manage common paediatric emergencies until expert advice or specialist assistance is available. They are familiar with legislation regarding safeguarding children in the context of Intensive Care Medicine practice.	✓	✓	✓	✓		✓	✓	✓	✓

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14	Intensive Care Medicine specialists recognise the special needs of, and are competent to provide the perioperative care to patients who have undergone cardiothoracic surgery, including providing pain relief and advanced organ system support utilising specialised techniques available to support the cardiovascular system.	✓	✓	✓	✓		✓	✓	✓	✓

FFICM Examination question banks will be reviewed and mapped to the new ICM HiLLOs.

7.6. Special Skills Modules Assessment Blueprint

SSY Modules	Aims	SLEs and MSF					ES Report	SSY Specific Tools		
		ACAT	CBD	Mini-CEX	DOPS	MSF		SSY Unique Assessments	Notes	Logbook requirement*
<b>Academic Research</b>	<i>Equip individuals with the competencies to deliver multicentre clinical research within their critical care units following appointment as NHS consultants, and also initiate local research, if individual aspirations and local resources support this</i>			✓		✓	✓	PbD Viva Voce	Requires proof of completion of application for funding, GCP certificate, presentation at national research meeting	✓
<b>Cardiothoracic Intensive Care Medicine</b>	<i>Equip individuals with the competencies required to work as a consultant in a specialist cardiothoracic intensive care unit</i>	✓	✓	✓	✓	✓	✓	Simulation (where available)	Additional training in echocardiography is encouraged but not assessed as part of this SSY	
<b>Echocardiography</b>	<i>To train an individual to echocardiography competence at either: BSE Level II ACCE (critical care echocardiography) or BSE Level I accreditation and to equip an individual with the knowledge, skills and attitudes to be clinical lead for echocardiography on a critical care unit</i>	✓	✓	✓	✓	✓	✓	Completion of BSE level 1 or 2 requires a formal practical assessment held by the BSE - see notes	Completion of the MCQ examination (for level 2) or practical assessment (level 1/2) is not required for progression providing the learning outcomes have been met	✓* *requirements vary between Level I and Level II BSE accreditation

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<b>ECMO (Extra-Corporeal Membrane Oxygenation)</b>	<i>To equip an individual with the knowledge and skills to provide ECMO as part of a team in a specialist Critical Care Unit</i>	✓	✓	✓	✓	✓	✓	Simulation (where available)		✓ Logbook of procedures (mandated number for completion of SSY)
<b>Home Ventilation</b>	<i>To train an individual in the management of patients with respiratory failure who require domiciliary ventilatory support.</i>	✓	✓	✓	✓	✓	✓	Patient satisfaction survey* *(either GMC or BTS approved tool)		
<b>Neuro Intensive Care Medicine</b>	<i>Consultant Intensive Care Medicine doctors with subspecialty training in NICM have a central role in neuro intensive care units. They share the ultimate responsibility of care with the admitting clinical teams and they collaboratively lead the provision of neuro intensive care, coordinating a multi-specialty team of physicians, surgeons and allied health professionals including specialised nurses, physiotherapists, neurophysiologists and clinical scientists.</i>	✓	✓	✓	✓	✓	✓	Simulation (where available)		

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<b>Paediatric Intensive Care Medicine</b>	<i>To allow a doctor who is unsuccessful in securing appointment to the PICM sub-specialty or who does not wish to specialise in PICM, the opportunity to further develop the depth and breadth of their paediatric ICM skills. This would facilitate a level of capability commensurate with being the paediatric ICM Lead in a non-specialist hospital but would not equip the doctor as a PICM specialist recognized by the GMC</i>	✓	✓	✓	✓	✓	✓		<p>This would facilitate a level of capability commensurate with being the paediatric ICM Lead in a non-specialist hospital but would not equip the doctor as a PICM specialist recognised by the GMC</p>	
<b>Pre-Hospital Emergency Medicine</b>	<i>Intensivists with appropriate prior expertise may apply via competitive national application for PHEM sub-specialty training (via IBTPHEM)</i>	<a href="#">See IBTPHEM curriculum</a>								

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<b>Quality Improvement in Healthcare</b>	<i>This module covers the competences required to adopt a logical, scientific and analytical approach to quality improvement. It encourages the development of leadership skills to allow trainees a platform to influence change in future practice. It aims to develop expertise to share with other members of the healthcare team.</i>	✓	✓	✓	✓	✓	✓		Although further professional accreditation (e.g. FMLM fellowship) is encouraged, it is not a requirement for completion of the year	✓
<b>Transfer Intensive Care Medicine</b>	<i>This module covers the competences required to make transfer decisions, select the most appropriate transport platform, provide safe, effective and focused in-transit critical care and ensure that the patients' condition and immediate needs are communicated to receiving hospital clinical staff.</i>	✓	✓	✓	✓	✓	✓		An audit of transfer standards locally or at a regional or network level is required. A number of relevant courses / accreditations may be beneficial but not required e.g. CCAT, DipIMC	



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<b>Education</b>	<i>This special skills module is intended for trainees who are considering developing a special interest in medical education in their consultant career. It intends to further a trainee's professional development as an educator through taking part in a wide variety of educational activities, self-evaluation and utilising frameworks in which to describe their own development as a trainer.</i>	✓	✓	✓	✓	✓	✓	Peer-observed teaching practice		

**\* SSY specific logbook requirement –** The SSY modules that require a specific logbook are identified above but please note that as these modules fall within stage 2 of ICM training, the standard curriculum requirements still apply and that includes maintaining a logbook of clinical procedures as a minimum.

**Abbreviations:**

- ACCE: Adult Critical Care Echocardiography
- BSE: British Society of Echocardiography
- BTS: British Thoracic Society
- CCAT: Clinical Considerations in Aero Medical Transport
- DipIMC: Diploma in Immediate Medical Care
- ECMO: Extra-Corporeal Membrane Oxygenation
- FMLM: Faculty of Medical Leadership and Management
- GMC: General Medical Council
- IBTPHEM: Intercollegiate Board for Training in Pre-Hospital Emergency Medicine
- NICM: Neuro Intensive Care Medicine
- PbD: Project based Discussion